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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/774,407	01/31/2001	Stephen D. Flanagin	13768.196	3841

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EXAMINER	
STRANGE, AARON N	
ART UNIT	**PAPER NUMBER**
2153	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/774,407	FLANAGIN, STEPHEN D.	
	Examiner	Art Unit	
	Aaron Strange	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 April 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 8-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4 and 8-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claims 1 and 12 are objected to because of the following informalities: There appears to be a typographical error "routable network device" in lines 24-25 of claim 1 and "server t is" in line 2 of claim 12. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-3, 8, 10-15, 17-20, 21-27, 29 and 31-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over West et al. (US 6,449,722) in view of Fox et al. (US 6,654,786) in further view of Tennison et al. (US 6,522,884).

5. With regard to claim 1, West discloses, in a system (Fig 1) including a wireless device (Fig 1, 10), a network device (docking station) (Col 3, Lines 23-26), and a carrier

(Fig 1, 20), the wireless device configured to communicate with the carrier over a first communication channel (network specific wireless channel) (at least Col 2, Lines 40-49) and configured to connect to the network device (at least Col 3, Lines 23-26), the network device configured to communicate with the notification server over a second communication channel comprising the internet (at least Col 3, Lines 26-29), the first communication channel having higher availability and lower bandwidth relative to the second communication channel (device must be docked to use second, faster connection), a method comprising performing:

an act of communicating with the wireless device over the first communication channel, the communication indicative of data for the wireless device being routable over the first communication channel (device communicated with carrier over wireless connection)(at least Col 2, Lines 35-49);

an act of receiving subsequent communication through the network device, the subsequent communication notifying the carrier that the wireless device has access to the second communication channel (carrier is notified that the device has switched to the second connection), the subsequent communication including a network device address for the network device to indicate to the carrier that data for the wireless device is also routable to the network device address over the second communication channel (network address of network device is inherently included in the communication, since it is required to send messages to the wireless device via the network device) (at least Col 3, Lines 23-54);

an act of automatically determining an appropriate communication channel, from among the fist and second communication channels, over which to route the data to the wireless device (data is routed over the internet if the device is connected to the docking station, otherwise it goes over wireless) (at least Col 3, Lines 23-54);

an act of routing the data over the appropriate communication channel for delivery to the wireless device in response to determining the appropriate communication channel (data is sent over the selected connection)(at least Col 3, Lines 23-54).

West fails to specifically disclose that the data transmitted to the wireless device is a notification from a notification server, indicating that a data object of interest has changed, or that determining an appropriate communication channel is based on the size of the notification and the current availability of the first and second communication channels.

Fox discloses a similar system for communicating between a wireless device and a server using multiple channels. Fox discloses routing notifications from a notification server to the wireless devices over the appropriate network (Col 6, Lines 64-66; Col 8, Lines 1-10; Col 13, Lines 39-47). This would have been an advantageous addition to the system disclosed by West since it would have allowed the wireless devices to receive notification when a data object of interest, such as a web server subscriptions (Fox, Col 5, Lines 40-65) has changed.

Tennison discloses a similar system for routing messages between a server and a wireless device. Tennison teaches selecting an appropriate communication channel

for each message to be transmitted based on the size of the message and the current availability of the communication channels (at least Col 3, Lines 39-47). This would have been an advantageous addition to the system disclosed by West since it would have allowed the message to be sent across the communication channel most preferable to the user (Tennison, Col 4, Lines 26-30).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to route notifications from the carrier to the wireless devices to notify them of changes to items of interest such as web pages as well as select a preferred communication channel based on the size of the notification and the current availability of communication channels, since it would have delivered the message over the communication channel most preferable to the user.

6. With regard to claim 2, West further discloses that the wireless device communicates with the network device (desktop) over a communication link (docking station), and wherein the wireless device automatically connects with the network device (at least Col 3, Lines 23-26).

7. With regard to claim 3, West further discloses that the network device is one of a desktop computer (at least Col 3, Lines 23-26), a blue tooth enabled LAN, and a kiosk.

8. With regard to claim 8, West further discloses an act of detecting that the wireless device no longer has access to the second communication channel (connectivity changes are detected)(at least Col 4, Lines 45-51).

9. With regard to claim 10, West further discloses notifying the notification server over the first communication channel that notifications can no longer be sent over the second communication channel (carrier is notified of connectivity changes)(at least Col 3, Lines 40-43).

10. Claims 11-15 and 17-20 are rejected under the same rationale as claims 1-3,8 and 10 since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

11. With regards to claims 21,25 and 26, West further discloses a proxy server (virtual base station controller) that re-routes the notifications over the appropriate channel (at least Col 3, Line 65 to Col 4, Line 6).

12. With regard to claim 23 and 36, West further discloses that the act of providing the wireless device with access to the second communication channel further comprises an act of connecting the wireless device at a docking station, the docking station having a communication link with the network device that provides the wireless device with

access to the second communication channel through the network device (at least Col 3, Lines 23-26).

13. Claims 22,24,27,29,31-33 and 35 are rejected under the same rationale as claims 1-3,8,10 and 11, since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

14. With regard to claim 37, West further discloses that it is more costly to use the first communication channel than the second communication channel (at least Col 2, Lines 63-66).

15. With regard to claim 38, West further discloses that the first communication channel is substantially always available for notifications to be sent to the wireless device (wireless connections are available whenever the wireless device is in the coverage area) (at least Col 1, Lines 11-26 and Col 2, Lines 35-43).

16. With regard to claim 39, West further discloses that the notification server is external to the infrastructure of the first communication channel and external to the infrastructure second communication channel (carrier is external to the wireless device -> virtual base station controller connection) (Fig 1) and wherein the notification server is further configured to send application data notifications to the wireless device over the

infrastructure of the first communication channel and the infrastructure second communication channel when the notification server is notified how to communicate with the wireless device over the infrastructure of the first communication channel or over the infrastructure of the second communication channel (the carrier is notified of the connectivity of the wireless device)(at least Col 3, 40-43).

17. Claims 4 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over West et al. (US 6,449,722) in view of Fox et al. (US 6,654,786) in further view of Tennison et al. (US 6,522,884) in further view of Official Notice.

18. With regard to claims 4 and 28, while the system disclosed by West and Fox shows substantial features of the claimed invention (discussed above), it fails to specifically disclose that the communication link between the wireless device and the network device is one of a serial link, a USB link, a wireless Bluetooth link, and an infrared link.

The Examiner takes Official Notice that it was old and well known in the art at the time the invention was made to connect a wireless device to a desktop computer using a serial, USB, Bluetooth, or infrared link. Each of these connection types were well known means of connecting a wireless device to a network device such as a desktop computer and selection of a particular one would have merely been a matter of personal preference to the system designer.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to allow docking of the wireless device using any known connection protocol in order to provide the devices with access to the Internet via wired networks.

19. Claims 9,16,30 and 34 rejected under 35 U.S.C. 103(a) as being unpatentable over West et al. (US 6,449,722) in view of Fox et al. (US 6,654,786) in further view of Tennison et al. (US 6,522,884) in further view of Hibbard (US 2001/0056503).

20. With regard to claims 9,16,30 and 34, while the system disclosed by West and Fox shows substantial features of the claimed invention (discussed above), it fails to disclose determining that the wireless device no longer has access to the high capacity channel if the notification server does not receive an acknowledgement to a notification within a predetermined period.

Hibbard teaches determining that a connection has failed if an acknowledgment has not been received within a predetermined time period, and subsequently connecting on a secondary connection (¶26). This would have been an advantageous addition to the system disclosed by West and Fox since it would have allowed the server to determine if a connection has failed without waiting for information from the wireless device.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to determine that the high capacity channel is no longer

available if the notification server does not receive an acknowledgement to a notification within a predetermined period.

Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Strange whose telephone number is 571-272-3959. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AS
6/4/07

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